

1. (CURRENTLY AMENDED) A barstock body fluid control valve comprising:  
a barstock body of preselected material having an inlet end and an outlet end, and a ~~substantially~~ uniform transverse cross-sectional perimeter defining the outer walls, wherein the uniform transverse cross-sectional perimeter of the barstock body remains unaltered from an originally manufactured barstock body;

a through machined main flow port located eccentrically on said inlet and said outlet ends;

wherein said main flow port eccentric location increases the available barstock thickness at one outer wall location and decreases barstock thickness in the opposite wall.

2. (PREVIOUSLY PRESENTED) The valve according to claim 1 further comprising a machined stem port perpendicular to said flow port positioned at said increased barstock thickness.

3. (PREVIOUSLY PRESENTED) The valve according to claim 1 further comprising a machined bottom flow port perpendicular to said flow port; a machined stem port centrally aligned with said bottom flow port, said stem port machined through the opposite outer wall of said barstock body; wherein barstock cross section is minimized adjacent to the stem port.

5. (PREVIOUSLY PRESENTED) The valve according to claim 1 in the form of a quarter turn ball valve.

6. (CURRENTLY AMENDED) A method of forming a barstock body fluid control valve using reduced barstock size and a standard size valve stem, the method comprising the steps of:

selecting the reduced size barstock having a ~~substantially~~ uniform transverse cross-sectional perimeter defining an outer wall configuration formed about a longitudinal center line and cutting the reduced barstock size to length;

maintaining the uniform transverse cross-sectional perimeter of the barstock body unaltered from an originally manufactured barstock body;

forming a valve body by machining flat surfaced ends on said reduced barstock size perpendicular to said barstock outer wall;

defining a throughbore axis offset from and parallel to the longitudinal centerline of the barstock;

machining a throughbore in said barstock symmetrically about the offset throughbore axis to produce an eccentrically located throughbore defining a thicker portion and a thinner portion of said barstock outer wall;

machining a valve stem bore perpendicular to said throughbore in the thicker portion of the barstock outer wall located a maximum distance from said offset throughbore axis;

selecting a standard size valve stem to be inserted in the valve stem bore in the thicker portion of the barstock outer wall resulting in the thinner portion of the barstock wall positioned opposite the valve stem; and

installing the standard size valve stem in said valve stem bore.

7. (CURRENTLY AMENDED) A two port fluid control valve comprising:

a barstock body having outer walls extending between an inlet end and an outlet end defined by a substantially uniform transverse cross-sectional perimeter circumscribed about a central longitudinal axis, wherein the uniform transverse cross-sectional perimeter of the barstock body remains unaltered from an originally manufactured barstock body;

a machined through bore extending between the inlet end and the outlet end of the barstock body about an offset longitudinal throughbore axis parallel spaced from the central longitudinal axis,

the through bore is eccentrically located with respect to the outer walls producing a thicker outer wall portion and a relatively thinner opposite wall portion of the barstock body; and

wherein a stem port communicates perpendicularly with said throughbore machined through said thicker outer wall portion of the barstock body.

8. (CURRENTLY AMENDED) A three port fluid control valve comprising:

a barstock body having outer walls extending between an inlet end and an outlet end defined by a substantially uniform transverse cross-sectional perimeter circumscribed about a central longitudinal axis, wherein the uniform transverse cross-sectional perimeter of the barstock body remains unaltered from an originally manufactured barstock body;

a machined through bore extending between the inlet end and the outlet end of the barstock body about an offset longitudinal through bore axis parallel spaced from the central longitudinal axis,

09/585,222

the through bore is eccentrically located with respect to the outer walls producing a thicker outer wall portion and a relatively thinner opposite wall portion of the barstock body;

a machined bottom flow port formed perpendicular to said through bore through the thicker outer wall portion; and

a machined stem port communicates perpendicularly with said throughbore and axially aligned with said bottom flow port, said stem port machined through the thinner opposite wall portion of said barstock body.